

## ABSTRACT:

ADDRESS AUTOCONFIGURATION IN AD HOC NETWORKS

The invention provides a system whereby a node can configure itself automatically with an address when it joins or establishes a network. Once the network is established, the nodes within that network exchange hello messages that are modified to give an indication of the network to which the nodes belongs. If two networks begin to merge with each other then the nodes at the edge of that network will receive hello messages from nodes which identify two different networks. When this occurs, the node can determine that network merging is occurring and carry out the process of duplicate address detection to ensure the uniqueness of its address within the entire combined network.

Figure 2